

Appl No. 10/035,954
Amendment dated January 12, 2006
Reply to Office action of October 12, 2005

REMARKS/ARGUMENTS

The applicant would like to acknowledge, with thanks, the Office Action mailed October 12, 2005. This amendment is responsive to the Office action mailed October 12, 2005. The last Office Action was a final Office Action; therefore, Applicant is including an RCE and fee with the response. By this amendment, claims 1, 9 and 17 have been amended. Claims 5 and 19-20 have been cancelled without prejudice or disclaimer.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-4 stand rejected being obvious based on the combination of U.S. Patent No. 6,856,624 to Magret (hereinafter Magret) and U.S. Patent No. 6,546,425 to Hanson (hereinafter Hanson). Claims 5, 9-17 and 19-20 stand rejected as being obvious based on the combination of Magret, Hanson and RFC 1432 by W. Wimer (hereinafter Wimer). For reasons that will now be set forth, claims 1-4 and 9-17 are not obvious based on Magret, Hanson and Wimer, alone or in any combination thereof. Claims 5 and 19-20 have been cancelled.

By way of review, as described on page 4, lines 11-20, a problem with prior art systems was that when a mobile host boots on its home subnet, it can use DHCP to obtain a home IP address. However, when a mobile host boots on a foreign subnet, it cannot simply broadcast a DHCP request on the local subnet to obtain an IP address for its home subnet. Therefore, a mobile host without an IP address cannot use mobile IP to forward a DHCP request to a DHCP server on its home subnet because it does not have a home IP address. An aspect of the present invention provides a solution to this problem. Independent claims 1, 9 and 17, as currently amended, recite that the DHCP client obtains an IP address from a DHCP server on its home subnet.

By contrast, Hanson teaches away from claim 1, 9 and 17. Hanson teaches that a mobile unit obtains new network addresses when it roams to a different subnet (DHCP listeners monitor DHCP broadcast messages and ascertain whether a Mobile End System has roamed from one subnet to another and is offered the ability to acquire a new network address by DHCP; col. 34, lines 37-42).

cf.

Thus, when a Mobile End System 104 using DHCP roams from one subnet to another, it will appear with a new network address. In accordance with a presently preferred exemplary

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embodiment of the present invention, Mobile End Systems 104 and Mobility Management Server 102 take advantage of the automatic configuration functionality of DHCP, and coordinate together to ensure that the Mobility Management Server recognizes the Mobile End System's "new" network address and associates it with the previously-established connection the Mobility Management Server is proxying on its behalf.

(Col. 34, lines 11-20). Because of this, Hanson requires a Mobility Management Server to track mobile units. The Mobility Management Server maintains the state of each Mobile End System including when a Mobile End System changes network address due to roaming from one interconnect to another (Col. 2, lines 54-67).

Therefore, Hanson does not teach that the DHCP client on a foreign subnet obtains an IP address from a DHCP server on the home subnet. Furthermore, the Examiner relies on Hanson to teach that the IP address is set to zero (reciting col. 35 line 11 – col. 36, line 48). Applicant respectfully disagrees. Hanson determines whether the BOOTP relay address (GIADDR) has 0 blocks, not the source IP address.

The aforementioned defects in Hanson are not remedied by any teaching of Magret. Magret, like Hanson, teaches away from claims 1, 9 and 17. Magret discloses that as a mobile node arrives at a foreign site and seeks to register with its home agent, it transmits a registration request including its private IP address (which would be non-zero) to the foreign agent (col. 5, lines 62-66). The foreign agent determines whether another mobile node shares the same private IP address (col. 5, line 66-col. 6 line 2). If another mobile node shares the same private IP address, the foreign agent sends a registration reply requesting the mobile node use a temporary address, which is sent along with the registration request to the mobile node's home agent (col. 6 lines 3-9).

Thus, claims 1, 9 and 17 can be distinguished from Magret because unlike Magret, the mobile node making a registration (DHCP) request does not yet have an IP address and thus does not transmit a private IP address to the foreign agent. Furthermore, the IP address is assigned by the DHCP server on the home subnet, whereas in Magret the foreign agent gives the mobile node a temporary address, which is also sent to the mobile node's home agent.

Furthermore, there is no motivation to combine the teachings of Hanson or Magret in either Hanson or Magret. Both teach different methods to obtain an IP address, Hanson by obtaining a new one whenever a mobile unit roams to a new subnet and Magret by assigning a temporary IP address to allow the mobile unit to obtain an IP address from its home subnet.

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The aforementioned deficiencies in Hanson and Magret are not remedied by any teaching of Wimer. The Examiner relies on Wimer to teach that the DHCP request has a giaddr field and a protocol field; obtaining the MAC address of the mobile host from the chaddr field in the BOOTP header and inserting the BOOTP relay agent IP address into the giaddr field of the BOOTP header, clarifies aspects of the BOOTP protocol.

Claims 2-4 are directly dependent from claim 1 and thus contain each and every element of claim 1. Therefore, for the reasons already set forth for claim 1, claims 2-4 are also not obvious in view of Magret, Hanson, and Wimer, alone or in any combination thereof.

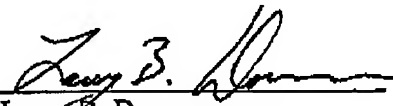
Claims 10-16 are directly dependent from claim 9 and thus contain each and every element of claim 1. Therefore, for the reasons already set forth for claim 9, claims 10-16 are also not anticipated or obvious in view of Magret, Hanson and Wimer, alone or in any combination thereof.

CONCLUSION

For the reasons just set forth, claims 1-4 and 9-17 are obvious based on the cited prior art; therefore the applicant requests withdrawal of these rejections. If there are any fees necessitated by the foregoing communication, please charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 72255/11670.

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